

PERCEPTIONS OF EMERGENCY DEPARTMENT PHYSICIANS
TOWARD COLLABORATIVE PRACTICE WITH
NURSE PRACTITIONERS IN AN EMERGENCY
DEPARTMENT SETTING

by

CAPTAIN TRACY A. WINGERT

THESIS

Presented to the Graduate School of Nursing Faculty
of the Uniformed University of Health Sciences
in Partial Fulfillment of the Requirements
for the Degree of

MASTER OF SCIENCE in NURSING

UNIFORMED SERVICES UNIVERSITY OF THE HEALTH SCIENCES

May 1998

19981009 002

TABLE OF CONTENTS

CHAPTER ONE: AIM OF STUDY.....	1
Introduction.....	1
Justification for the Study.....	4
Research Questions.....	7
Definitions of Relevant Terms.....	9
CHAPTER TWO: EVOLUTION OF THE STUDY.....	10
CHAPTER THREE: METHOD OF INQUIRY - GENERAL.....	14
CHAPTER FOUR: METHOD OF INQUIRY - APPLIED.....	20
Setting and Sample.....	21
Data Collection.....	22
Data Analysis.....	23
CHAPTER FIVE: FINDINGS.....	27
Theme Clusters.....	27
Theme Category 1: Role Performance Issues.....	27
Theme Cluster 1A: Functional Capacity of NP.....	27
Theme Cluster 1B: Lack of Autonomy.....	28
Theme Cluster 1C: Philosophy of Care.....	30
Theme Category 2: Educational Backgrounds/Knowledge Base.....	30
Theme Category 3: Trust Issues.....	32
Theme Category 4: Role Receptivity.....	33

CHAPTER VI.....	34
Discussion of the Findings.....	34
Significance of the Study.....	37
Recommendations for Future Research.....	40
REFERENCES.....	41
APPENDICES.....	44
Appendix A - Consent from Mary Jane Cairo.....	44
Appendix B - Consent Form.....	47
Appendix C - Facility Permission Letter.....	50
Appendix D - USUHS Institutional Review Board Approval.....	52

CHAPTER ONE: AIM OF THE STUDY

Introduction

Once considered reserved for life-threatening disease or illness, emergency departments in the United States are now described as the primary care clinic and the social work department for many Americans (Grumbach, Keane & Bindman, 1993). A 1992 study found 2 million children in the United States routinely used the emergency department as their primary source of care (Halfon, Newacheck, Wood & Peter, 1996). Studies have shown 50-90% of all patients presenting to emergency departments have minor complaints which could easily be treated in primary care settings (Dowling & Dudley, 1995; Grumbach et al., 1993). The non-urgent use of emergency departments has led to overcrowding, long waiting times and patient dissatisfaction (Grumbach et al., 1993; Derlet & Nisho, 1990, Liggins, 1993). Overcrowding and inappropriate use of the emergency department also interferes with the care of critically ill patients (Dowling & Dudley, 1995). Civilian hospitals have developed various strategies to address patients with minor complaints varying from outright refusal of care, to triaging to off-site clinics, developing non-urgent care clinics and establishing Fast Track Clinics also known as Minor Emergency Areas (MEAs) within existing emergency departments. These Fast Track clinics have been staffed with a variety of non-physician, mid-level health care providers including nurse practitioners (Covington, Erwin & Sellers, 1991; Grumbeck et al., 1993; Simon et al., 1996; Wright, Erwin, Blanton & Covington, 1992).

In the past, care for patients in emergency departments had been provided solely by physicians. It was not until the mid 1970s that nurse practitioners began to provide

services in civilian emergency departments due to an increase in patients use. Reasons for increased use of nurse practitioners in the Emergency Department, included fewer primary care providers with more physician specialization, inaccessible care at night and on weekends, and the availability of third party payment for primary care provided in the Emergency Department (Hayden, Davies & Clore, 1982).

In the 1970s, the military also experienced a physician shortage in its health care system. To overcome the shortage, the military began utilizing physician assistants and nurse practitioners in a variety of settings (Herrera & Gendron, 1994; Maroon, 1976). Through the years physician assistants have successfully expanded their role to include emergency medicine (Herrera & Gendron, 1994). In 1990, specific guidelines established by the Executive Committee of the American College of Physician's Board of Directors, determined the types of patients/conditions which physician assistants could treat along with a list of procedures that they could perform in the Emergency Department.

In 1974, Air Force nurses were given the opportunity to apply for the United States Air Force Primary Care Nurse Practitioner Program at the University of Arizona. Available to nurses from all branches of the service, the primary care nurse practitioner program along with other nurse practitioner specialities such as Pediatrics and Obstetrical/Gynecological, was developed to combat the physician shortage (Maroon, 1976). The primary care nurse practitioners educated at the University of Arizona worked in a number of settings including the emergency department. Primary care nurse practitioners took histories, performed physical exams, requested laboratory and x-ray tests, and diagnosed and/or referred patients as needed. The program remained open

from 1974 to 1976. No information could be found regarding the reason for the program's closure.

Today, there are approximately 15-20 family nurse practitioners and 3-4 adult nurse practitioners in the Air Force, who work in primary care clinics and family practice clinics. No Air Force nurse practitioners are exclusively assigned to emergency departments although some rotate through to provide coverage (Major Conrad, Assignment Coordinator, Military Personnel Center, Randolph AFB, personal communications, March 25, 1998). The majority of the family nurse practitioners in the Air Force graduated from the Uniformed Services University of Health Sciences (USUHS) in Bethesda, Maryland. The USUHS program, which graduated its first family nurse practitioners in 1995, is open to all branches of the military. The remainder of the family and adult nurse practitioners in the Air Force attended civilian graduate or certificate nurse practitioner programs (Major Conrad, Assignment Coordinator, Military Personnel Center, Randolph AFB, personal communications, March 25, 1998).

The official 1991 policy statement by the American College of Physician states that nurse practitioners may render care "under the supervision of an emergency physician who is ultimately responsible for the patient's medical care....", (Curry, 1994, p. 208). Though this policy statement is in place for guidance, a 1996 study by Cairo in which civilian, board-certified emergency department physicians were interviewed, found that physicians continue to have concerns regarding the educational preparation of nurse practitioners, prescriptive authority, hospital privileges and legal liability.

In her editorial, in the August 1993 issue of the Journal of Emergency Nursing, Lenehan stated that some “influential emergency room physicians are excited about concept of utilizing nurse practitioners working in the Emergency Department” (p. 269). In fact, one physician proposed the utilization of nurse practitioners in emergency medicine, presented “the perfect opportunity for collaboration” (p. 269). These physicians realized that nurse practitioners could benefit emergency departments and hospitals by seeing minor medical patients during peak hours.

Justification for the Study

In the late 1990s, the military must again look carefully at the use of non-physician providers for two important reasons. First, TRICARE, the military’s managed health care system will create competition and budget constraints that will require close regulation of the allotment of personnel resources to include physicians, nurses, and support staff (Hart & Conners, 1996). Secondly, the recent downsizing of the military, which has included health care providers, will apply continued pressure on the ability of the military to meet its projected demands for health care services. In fact, more downsizing of medical personnel is predicted (Tomich, 1997). In contrast, the number of beneficiaries in military treatment facilities is projected to remain stable over the next five years while the percentage of beneficiaries over the age of 44 will increase during the same time period (McGee & Hudak, 1995). The military emergency departments will remain open to retired service members who may not be eligible for TRICARE but are Medicare-eligible beneficiaries. Historically, usage of the military health care services by retirees, in general, has been high. A 1994 study found that of 705 retirees surveyed,

90% had used the military treatment facility within the last year in some form (Blount & Hereford, 1995).

The military, now more than ever, needs to develop new strategies to reorganize all resources including personnel to provide high quality health care (McGee & Hudak, 1995). One cost-effective strategy which needs exploration, is the utilization of nurse practitioners in Air Force emergency departments. Currently, the Air Force's largest medical center is the only Air Force facility utilizing civilian family nurse practitioners within a separate non-urgent care area of the existing emergency department. The Minor Care Clinic or MCC at this facility was established in January 1996 and is staffed with five physician assistants and two civilian family nurse practitioners. The MCC occupies a separate hallway within the emergency department and is overseen by a board-certified emergency department physician. Patients are triaged to that area of the emergency department by a registered nurse or an emergency medical technician. In the first year of existence, the MCC saw 28,500 patients or 34% of the total emergency department patient population. The average daily census of the clinic was 99 patients. Of that number, approximately two to four patients were reassigned back to the main emergency department for further work-up, consultation, and, at times, admission. Approximately 12% of the patients seen in the MCC are retirees who are over the age 65 and not eligible for TRICARE. Another 25% of the patients seen in this clinic are enrolled in TRICARE. The final 63% of the patients seen in this clinic are eligible but not enrolled in TRICARE (Capt Christopher Steffy, Medical Director, Minor Care Clinic, personal communications, April 3, 1997).

Success of the Minor Care area at this Air Force facility has been measured by patient satisfaction and a decrease in the overall patient waiting times. Before the implementation of the MCC, patients with non-urgent complaints averaged a three hour waiting time to be seen by a provider. Patients with minor complaints now average a one hour wait before being seen by a provider.

The medical director of the Minor Care Clinic believed that the family nurse practitioners and the physician assistants performed very well in this setting. The medical director also felt that a positive relationship existed between the medical staff and the physician assistants and family nurse practitioners.

Currently, the Minor Care Clinic operates with no written protocols or guidelines. The only guidelines being developed were geared toward the emergency medical technicians in order to improve in the triaging of appropriate patients to the clinic. The medical director stated that because all of the nurse practitioners had previous emergency room experience as well as experience as family nurse practitioners, they needed virtually no orientation and were capable of all technical and physical skills on their first day in the MCC (Capt Christopher Steffy, Medical Director, Minor Care Clinic, personal communication, April 3, 1997).

As mentioned earlier, family nurse practitioners are predominately used in the Air Force outpatient settings at this time, though family nurse practitioners are providing emergency room coverage on a limited basis (Colonel Quannetta Edwards, United States Air Force, Family Nurse Practitioner, Clinical Instructor, Uniformed Services University, written communication, November 3, 1997). For continued coverage and

possibly permanent assignment of Air Force Family Nurse Practitioners in other emergency departments to occur, a collaborative relationship must continue to grow between nurse practitioners and emergency department physicians.

Interviewing Air Force emergency department physicians regarding their attitudes and perceptions of the role of the nurse practitioner within an Emergency department setting served the purpose of :

1. Providing a forum for military Emergency department physicians to discuss their views, concerns or preexisting biases regarding assigning nurse practitioners to the emergency department.
2. Increasing Air Force nurse practitioners' knowledge of physician's perceptions of their role. This increased awareness may prompt nurse practitioners to provide informational data to physicians, other health care providers and hospital commanders regarding their scope and limitations.

Research Questions

The following research questions identified for this study were:

1. What is the attitude of Emergency department physicians regarding collaborative practice with Family Nurse practitioners in an emergency department setting?
2. How do Emergency physicians conceptualize the role of the Family Nurse practitioner in emergency departments throughout the Air Force?

Naturalistic inquiry using descriptive qualitative methodology was the approach used to conduct this study. The qualitative strategy was the most appropriate research

design for this study as it maximized the possibility of eliciting the sought after information. The research questions in this study focused on human thoughts and feelings. The strength of qualitative research is that it allows the researcher to understand human behavior by allowing the researcher to conduct the study in the context and setting from the participant's frame of reference. The flexibility of qualitative research to incorporate many variables increases the ability to derive meaning and useful findings from the study (Marshall & Rossman, 1994).

The study relied on interviews as the primary method of data collection. Five questions were utilized to initiate conversation with Air Force emergency department physicians. The questions asked prompted physicians to elaborate on their definition of advanced practice nursing and to discuss their knowledge of educational requirements, and scope of practice of nurse practitioners. Four of the questions used in this study were very similar to the four questions used in Cairo's 1996 study (See Appendix A). A fifth question was added, however, that specifically asked if emergency physicians saw a benefit of utilizing nurse practitioners in all levels of Air Force emergency departments.

The qualitative strategy of a semi-structured interview allowed for modification of the research design as the research proceeded. As qualitative researchers immerse themselves in the research setting and begin interviewing subjects, they are able to start focusing on and clarifying relevant themes and patterns (Marshall & Rossman, 1994). Conducting the interviews within the emergency department was beneficial because it allowed for freer responses and provided the physicians with a forum to discuss what they regarded as relevant.

Definitions of Relevant Terms

Attitude - A way of acting, feeling or believing, one's disposition

Collaborative practice - Positive working relationship between nurse practitioners and physicians in the attainment of mutual patient goals/outcomes

Family Nurse Practitioner - A registered nurse with a master of science in nursing (MSN) who is credentialed by the facility and certified by the American Nurse Credentialing Center (ANCC) to diagnose, assess and treat patients across the lifespan.

Physician Assistant - A person trained in certain aspects of medicine who works under the direction, supervision and within the legal license of a physician and who is also certified by the American Association of Physician Assistants (AAPA)

Emergency Department physician - A physician board-certified in emergency medicine who works in a various levels of emergency departments

Fast Track Clinic/Non-Urgent Care Area - A separate area within existing emergency departments where patients with minor complaints may be seen by a variety of health care providers after triage.

CHAPTER TWO: EVOLUTION OF THE STUDY

The role of the nurse practitioner emerged in the United States in the 1960s due to a shortage of primary care physicians in urban and rural areas (Read & George, 1994). Within traditional ambulatory care settings, studies have estimated that nurse practitioners can effectively deliver 50-90% of all health care needs at lower costs than physicians (McGrath, 1990). The demand for the services of nurse practitioners in emergency departments has grown in response to the high number of patients who present with non-urgent complaints. Nurse practitioners functioning in emergency department settings have been shown to increase quality of cost-effective patient care, decrease malpractice costs, decrease time emergency department physicians spend with non-urgent patients and increase patient satisfaction (Dowling & Dudley, 1995).

This study, which explored and described Air Force emergency department physicians' attitudes toward collaborative practice with Family Nurse Practitioners, evolved due to the personal interest and experiences of the researcher. The researcher, a certified emergency department nurse, experienced first-hand the non-urgent use of a Level II Air Force emergency department by active duty and retired military members and their dependents while assigned as the assistant charge nurse during a three year period, September 1993 to July 1996. This emergency department was approved as a Level II facility by the Joint Commission on Accreditation of Healthcare Organizations because of its ability to offer emergency care 24 hours a day. To receive a Level II designation, emergency departments are required to be staffed with at least one physician 24 hours a day who is experienced in emergency care. The physician must also have the

ability for specialty consultation within 30 minutes. The emergency department must have the ability to communicate via radio with emergency medical technicians or paramedics while they are providing care in the ambulance or on the scene (Cross & Riggs, 1984).

During the researcher's assignment at a Level II emergency department, a six month study was conducted on the utilization of the department by military beneficiaries. On presentation to the emergency department, all patients were triaged by a registered nurse or technician and placed into one of three categories: emergent, urgent or non-urgent. To assure quality control of the patient classification, the medical staff, consisting of three board-certified emergency room physicians and two physician assistants, reevaluated the assigned classification before the patient was discharged. If the classification was different from that which has been originally assigned by the nurse or technician, the appropriate changes reflecting the reassignment were made in the computer and on the patient record.

As stated above, patient classifications were emergent, urgent and non-urgent. If the patient was given the classification of emergent, immediate intervention by either the nursing staff or medical staff was required within minutes after arrival to the emergency department. This classification was designated for patients who presented with life-threatening problems such as chest pain, shortness of breath, major trauma, massive hemorrhaging or stroke. Patients classified as urgent needed to be seen by a health care provider within 30 minutes to 24 hours after presentation to the emergency department. Examples of patients that fell into the urgent classification included otitis media, urinary

tract infections, gastroenteritis, minor trauma and sore throats. Patients classified as non-urgent would include any patient with complaints requiring medical attention within 72 hours. Examples of patients that fell into this classification include those presenting with complaints of nonsymptomatic sexually transmitted diseases, ingrown toenails, suture removal, and rashes.

The census of this emergency department averaged approximately 2000 patient visits per month. The study findings indicated that fifty-five percent of all patients presenting to the emergency department were categorized as non-urgent. This correlates to an average of 1100 patients per month or 13,200 patients per year with non-urgent complaints seen in the facility's emergency department. The non-urgent patients could have been appropriately treated in a clinic setting by a primary care provider.

Non-urgent patients with minor complaints add to the congestion in the emergency department and lead to a delay in the treatment of patients with emergency complaints. These non-urgent patients often experience long waiting times as physicians concentrate on the needs of acutely, seriously-ill patients. It is desirable for the emergency department to attract the low-acuity patients, however, as their evaluation is less time consuming and is a source of revenue for third party reimbursement (Covington et al., 1991). This becomes important to the military as it comes on-line with TRICARE. Military health care facilities will now be competing with the civilian sector for third party reimbursement dollars.

Nurse practitioners utilized in emergency departments to treat non-urgent patients offer several advantages. First, nurse practitioners are able to assess, diagnose and treat

minor illnesses and are able to perform needed nursing care. In addition to providing care for non-urgent patients, nurse practitioners can provide follow up care for such needs as suture removal, dressing changes or wound checks. Nurse practitioners may also improve the patient flow through the emergency department, thereby decreasing waiting times. Studies have also found that the majority of non-urgent patients are young adults (below the age of 40) and children (Dowling & Dudley, 1995). Family nurse practitioners are appropriate providers for these type of patients because their education and preparation encompasses the treatment of patients accross the lifespan.

CHAPTER THREE: METHOD OF INQUIRY - GENERAL

Qualitative research, once considered only a prelude to quantitative research, is itself useful as an end. Qualitative research is the most efficient method for obtaining the type of information required to answer empirical research questions (Glaser & Strauss, 1966). Qualitative research is used to gain insights through discovering meanings. Insights gained from qualitative research can guide nursing practice and aide in theory development (Burns & Grove, 1993). Data collection used in qualitative research include participant observations, interviews, questionnaires and anecdotal recordings. Its open ended structure permits freer responses than quantitative research (Abdellah & Levine, 1994). Sample size in qualitative research may require smaller numbers to allow more intensive examination of the sample selected (Burns & Grove, 1993). The sample size used in qualitative research is ambiguous or "it depends" on the data collected. A rule of thumb quoted from Munhall and Boyd (1993) states "that data are collected until redundancy in the data occurs or the researcher finds that no new data are emerging" (p. 441). Purposive sampling is mainly used in qualitative research as there is an effort made by the researcher to only include participants with particular characteristics in order to increase theoretical understanding of some facet of the phenomena being studied (Burns & Grove, 1993).

When beginning qualitative research, most researchers pick topics which are, on some level, derived from personal experience. Personal investment, which usually becomes largely invisible as the study is conducted, can be explored to enhance the research process (Munhall & Boyd, 1993). The researcher's personality is a key factor,

as the researcher must become closely involved in the subject's experience in order to interpret it. The researcher must remain open to the perceptions of the subjects and not attach individual meaning to it. In order to accomplish this, the qualitative researcher develops strategies such as bracketing and intuiting to facilitate openness during data collection and analysis. Bracketing involves setting aside what is known about the subject being studied. Intuiting or actually looking at the phenomenon can only take place after bracketing (Burns & Grove, 1993).

The qualitative researcher plays a direct role in both data collection and data analysis (Abdellah & Levine, 1994). Data collection utilized in qualitative research includes participation in the setting, direct observation, in-depth interviewing and document review. A qualitative researcher who participates in the setting will become immersed in the setting and will hear, see and experience the reality of the setting as participants do. The researcher also spends considerable time in the setting learning about daily life. In contrast to other qualitative tools of data collection, a researcher gaining knowledge through direct observation makes no special effort to become involved as a participant and learns about behavior and their meanings strictly through observation (Erlandson, Harris, Skipper & Allen, 1993).

In-depth interview or "conversations with a purpose" are used extensively in qualitative research (Marshall Rossman, 1994). Interviews allow researchers to understand the meanings of participant's daily activities from the participant's point of view. Many times qualitative researchers use an interview guide to facilitate rather than

direct conversations as the course of qualitative research can not be predicted (Munhall & Boyd, 1993).

Data gathering is done in the naturally occurring, social environment (Glaser & Strauss, 1966). The researcher initially observes the typical social structure and makes field note observations. Interviews, which are often taped, augment the observations of the researcher and serve to clarify the meanings the participants themselves attribute to a given situation (Munhall & Boyd, 1993). During the interview, as questions become more and more specific, the skilled researcher will begin to sense and analyze the information from the respondent. Skilled interviewers may use probes or directed cues to clarify points which require further development.

Following the interview process, the researcher or another person transcribes the tapes into written form which can then be edited. Field notes are then incorporated into the edited copies of the interview. After all the interviews are completed and transcribed, the researcher can begin data reduction and data display. The data is sorted and transformed into an organized assembly of information and displayed in either tables, groups or matrices. Conclusion drawing and verification involves attaching meaning to the findings (Burns & Grove, 1993).

Utilizing grounded theory, one method of qualitative research, Cairo (1996) was able to derive and generate substantive theory from the data collected through interviews with civilian emergency room physicians. Grounded theory methodology is useful in discovering what problems exist in a social sense and the process persons use to handle them (Burns & Grove, 1993). Cairo used the analytic method of constant comparative

analysis during data analysis of her study. Data analysis took place in four steps; substantive coding, theoretical coding, delimiting the theory, refining and writing the theory.

During substantive coding, each piece of data was coded as a concept and categorized into recurring themes. Theoretical coding then took place to establish the dimensions of the categories. At this point, the comparison of data shifted from comparing statement with statement, to comparing statements with the properties of the emerging theories. As Cairo (1996) did the next step, delimiting theory, the number of categories were reduced and combined which established the boundaries of her theory. This enabled the most important concepts of the theories to emerge. Finally Cairo refined, developed and wrote her theory.

The results of Cairo's (1996) study identified some acceptance as well as some reluctance from physicians regarding many aspects of the nurse practitioner role. Cairo developed a physician perception model to illustrate the physician views regarding nurse practitioners within an emergency department setting. The results of the interviews were categorized as either validation or rejection of the role. Validations included physician responses that indicated approval of the nurse practitioner role. Rejection included negative responses and attitudes that expressed nonacceptance or disapproval.

The two categories were then further subdivided. The two subcategories under validation included passive acceptance which involved agreement and approval of certain aspects of the role and active endorsement which was an enthusiastic expression of understanding and support of the role. The two subcategories under rejection were

indifference and disapproval. Responses classified as indifference were neither supportive or negative. Responses regarded as disapproving indicated unfavorable attitudes toward the nurse practitioner role.

Cairo (1996) concluded that physicians viewed the nurse practitioner role in the emergency department as a "dependent collaboration" rather than the independent and collaborative role envisioned by most nurse practitioners. Cairo believed that one prime factor for this may be that physicians do not understand advanced practice nursing and that most physicians thought the nurse practitioners wanted to practice medicine, not advanced nursing. Cairo suggested increasing the contact between nurse practitioners and emergency room physicians when the physicians were in training. This increased contact may foster a better level of physician's understanding of the training and education nurse practitioners receive.

Although the questions used from Cairo's 1996 study were modified and then utilized for this study, a true replication of Cairo's study was not done. Cairo's study utilized one type of qualitative methodology, grounded theory. Grounded theory was appropriate for her research as Cairo was studying an area in which little previous research had been conducted. According to Cairo, an extensive literature review was not done before conducting her data. According to Burns and Grove (1994), this was appropriate as grounded research is to be done with no pre-existing theory as an organizing framework.

In this study, a review of the related research was conducted before data collection and utilization of the descriptive qualitative methodology. According to Marshall and

Rossmann (1994), studies that “use concepts developed by previous researchers and formulate questions similar to those used in previous work constitute an extension of theory and will expand the generalizations or more finely tune theoretical propositions” (p. 25).

CHAPTER FOUR: METHOD OF INQUIRY - APPLIED

As in all qualitative research, the researcher must bracket individual and personal presupposed assumptions and attitudes before conducting the research. Bracketing or setting aside what is known about the experience being studied facilitates the researcher's ability to see all facets of the phenomenon (Munhall & Boyd, 1993). Bracketing was accomplished by this researcher by putting in writing the preexisting feelings and beliefs regarding the contributions that nurse practitioners could provide in emergency departments. The first assumption bracketed by this researcher before conducting the study involved the concept that the nurse practitioner could be a valuable, cost effective component of the health care delivery system within Air Force emergency departments. In conjunction with this assumption, the researcher also bracketed the idea that successful communication and mutual acceptance between nurse practitioners and emergency room physicians are paramount to the successful role development of nurse practitioners within the emergency room setting.

After bracketing of preexisting assumptions was completed, the researcher began the research process. The researcher began by receiving permission to interview emergency room physicians at an Air Force facility which did not utilize nurse practitioners within its emergency department. The Element Leader of the Emergency Department was given the authority to grant permission by the commander and a consent letter was obtained by the researcher before conducting the study (see Appendix C). A proposal for this research study was also submitted to the Institutional Review Board of the Uniformed Services University of the Health Sciences. Approval for the research was granted prior to the data collection phase (see Appendix D).

Ethical considerations were an important element in this research as in all qualitative research studies. Respondents were informed that the purpose of the study was to describe Emergency Department physician's attitudes toward collaborative practice with Family Nurse Practitioners. Respondents were encouraged to be honest, open and to discuss their views and concerns regarding assigning nurse practitioners to emergency departments. Respondents were also asked to read and sign a consent form before the interview process began. The consent form was then signed by a witness and the researcher. The respondents were also notified that the interviews would be audio-recorded in order to enable the researcher to transcribe the interviews at a later date. Confidentiality was provided to each participant by conducting the interviews privately in an office within the Emergency Room with only the researcher and the respondent present. Confidentiality was also maintained as no names were used during the interview so participants could not be identified on the audio-recordings.

After the interviews were conducted, the consent forms and the audio tapes were sealed and placed in a locked file cabinet in the home of the researcher. Audio recordings were transcribed by the researcher with no names written on the transcribed interviews.

Setting and Sample

A sample of five board-certified emergency room physicians who practiced within a Level II Air Force emergency department was used as the study population. The Air Force facility did not utilize nurse practitioners within the emergency room department at the time of data collection but utilized Air Force Reserve officer physician assistants. The facility is a teaching hospital for Family Practice Residents and a training site for physician assistant

students. The respondents were male between the ages of 30-45 who had completed either a three or four year Emergency Medicine Residency. The physicians had completed their Emergency Medicine residency within 12 months of the interviews and had been practicing emergency medicine for less than one year. All five of the physicians had worked with nurse practitioners in some capacity either in medical school or as a resident. The five doctors had worked with nurse practitioners in a variety of settings which included OB/GYN, pediatric ICUs, Family Medicine Clinics and Primary Care Clinics.

Data Collection

After signing informed consent for both the interview and audio-recording, the respondents were asked to respond to open-ended questions adapted from Cairo's 1996 study (permission granted from Cairo, see Appendix A). The fifth question was added to specifically gain insight from the physician regarding the benefit of the use of nurse practitioners in Air Force emergency departments.

The questions were as follows:

1. What is your understanding of advanced practice nursing?
2. How does a nurse become an advanced practice nurse from the educational perspective?
3. How would you define and describe the role of the nurse practitioner?
What do you base your definition/description on, e.g. personal knowledge, experience, etc.?
4. How do nurses and physicians differ in training, knowledge and skills?

5. Do you see a benefit in assigning nurse practitioners to an emergency department?

Physicians were encouraged to provide narrative responses that would help elicit an understanding of their attitudes and insights. The researcher attempted not to lead any particular response and only ask for clarification to aid in interpretation. A considerable amount of time was spent observing each of the physicians while they worked within the emergency department and writing field notes. The amount of time spent was beneficial because it allowed for observation of the types of patients seen in the evening when the hospital's clinics were closed. There were patients in the emergency department the majority of the time the researcher was present. None required the immediate intervention/care by the physician and no patients with complaints of chest pain, shortness of breath or massive injury/trauma were seen in the 20-30 hours of time the researcher spent in the emergency department. No ambulances presented to the emergency department. Physicians appeared to be seeing patients which were classified as urgent or non-urgent as the physicians were not conducting themselves with a great sense of urgency.

Data Analysis

After transcription of the data (done by the researcher) the process of data analysis took place. Data analysis utilized the strategies suggested by Munhall and Boyd (1993):

1. Ponder the meaning of data in parts and as a whole on repeated occasions.
2. Search for repeated instances that support each interpretation.
3. Reach for complex interpretations to account for variation in the data; contra-

indication in data sometimes calls attention to “real” contraindication in people’s lives.

4. Use all the data available, including field notes, the literature and any other sources of inspiration.
5. Identify the technical aspects of data analysis. If data analysis procedures from one of the qualitative procedures is useful, adopt it in the design. Recognize that you are adopting a procedure, rather than an entire design.
6. Relate the finding to preexisting knowledge, keeping in mind that although the project may be an end in itself in some ways, to qualify as science, it must be entered into a dialogue with one’s colleges. (p. 443).

The researcher began data analysis by reading each interview several times. The researcher then highlighted and extracted repetitious phrases or sentences from each interview. As each new interview was reviewed, repetitious information was considered significant and was thereby included in a previously identified category or separated into a new category. Four major theme categories were identified with significant statements to support each theme category noted. The next step taken by the researcher was to meet with a doctorally-prepared nurse researcher who had been previously given the thesis proposal and raw data/interviews for separate, non-biased data analysis/conclusion. The doctorally prepared nurse was familiar with Air Force emergency departments and is considered to be an expert in qualitative research. The purpose of the meeting was to assure mutual agreement or consensus on the identified theme clusters and to ensure confirmability of the study discussed below.

The findings of the study were then judged on the basis of credibility, transferability, dependability and confirmability as described in Marshall and Rossman (1995). Credibility involves the ability or manner of the study to ensure that subjects were properly identified and described. Credibility was achieved through prolonged engagement of the researcher in the research setting and through observation. Prolonged engagement involves learning the culture of the people being studied and building trust (Lincoln & Guba, 1985). Prolonged engagement was established by the researcher prior to undertaking the study as the researcher had worked in a military emergency department for three years. The researcher also spent three to four hours in the emergency department while each respondent was working which enabled the researcher to observe each participant closely and to see what types of patients presented to the emergency department.

Transferability involves the issue of applicability or to what extent the findings of one study can be applied to other subjects and settings. Transferability was achieved by assuring that respondents fit population specifications which allowed the researcher to generalize the findings from which the sample was drawn. For example, only emergency department physicians were interviewed and their responses were written as a descriptive dialog.

Dependability of a study concerns the issues of consistency of the study's findings if it were to be repeated in a similar setting. As this study had similar qualities to Cairo's 1996 study, such as the sample population, data gathering technique and tool, the results were continually compared. In qualitative research, it is assumed that the social world is always being constructed which interferes with exact replications of studies (Marshall & Rossman, 1995).

Confirmability or the issue of neutrality within a study was achieved through a confirmability audit with a doctorally prepared nurse researcher. The doctorally prepared nurse researcher/auditor was given a copy of the proposal and a copy of the raw interviews. The auditor became familiar with the system used by the researcher to organize and categorize the raw material. The auditor studied the material to ensure that the methodological approach used was appropriate for the study. Following this determination, the researcher and the auditor engaged in negotiation and came to an agreement on the themes and clusters identified in the study. The confirmability audit ensured the emerging themes were determined by the subjects and not by the researcher.

CHAPTER FIVE: FINDINGS

This chapter presents the findings of the study. The four theme categories are presented, followed by supportive exemplararies/descriptors.

Theme Clusters

1. Theme Category 1: Role Performance Issues

Theme Cluster 1 A: Functional Capacity of the Nurse Practitioner

Theme Cluster 1 B: Lack of Autonomy

Theme Cluster 1 C: Philosophies of Care

2. Theme Category 2: Educational Backgrounds/Knowledge Base

3. Theme Category 3: Trust Issues

4. Theme Category 4: Role Receptivity

The four theme categories with significant statements to support the theme are as follows:

Theme Category 1

Role Performance Issues

Theme Cluster 1A: Functional Capacity of the Nurse Practitioner

Many comments regarding the nurse practitioners functioning in the same capacity as a physician assistant or resident were made. No specific definition of the role of physician assistant was ever offered by any of the physicians and was not obtained.

I would describe nurse practitioners as pretty similar to a physician assistant in that they can practice with a lot of independence on a great majority of patients...for legal purposes they would need more supervision on complicated patients/cases.

I equate nurse practitioners pretty much to physician assistants because I have worked with a lot of physician assistants and they seem to do the same thing which is a lot of things doctors do but they can hand off the more advanced stuff.

I have worked with a few and I equate them to physician assistants, I really do, I know there's a difference in training and there's lots of different routes that people get to both of those lines...there's a lot of variation there.

What do I see nurse practitioners doing? I expect them to hand off the more advanced patients or be in a resident's role.

Nurse practitioners are kind of independent practitioners under physician supervision. Kind of the same as a physician assistant just a different philosophy, the main difference is different philosophy of care...more towards the nursing aspect than the physician assistants have.

At Level II emergency rooms, nurse practitioners would probably be utilized in the same capacity as a physician assistant.

I don't see that much of a difference between a nurse practitioner and a physician assistant.

I see them as a mid level health care provider somewhere between a regular nurse and a professional MD....like a physician assistant.

Theme Cluster 1B: Lack of Autonomy

Although the physicians were favorable of nurse practitioners functioning in an Emergency Department; each envisioned nurse practitioners functioning in a dependent role under the supervision of a physician. The physicians felt that a physician would be ultimately responsible for the patients once the patient left the Emergency Department.

My understanding of nurse practitioners is that they usually work under the direction of a physician not always on the premises but they do consult or work with.

Nurse practitioners do the nuts and bolts stuff that doctors do on a routine basis and when they have questions or they seem to get over their heads they hand it off to the docs.

Depending of their training, nurse practitioners in the right situation can do just about anything which is not always easy to do especially in the ER, you know if you find an ER where you are

right up there in the front line its hard enough to do as docs and so I think its up to the training and then the understanding between the doctor that they are working with to what they can do.

Nurse practitioners are pretty similar to a PAs in that they can practice with a lot of independence on a great majority of patients...for legal purposes they would need more supervision on complicated patients/cases.

I do think you have to have one person (a doctor) that is going to be responsible if a person who gets sent out of the ER has complications.

I would say that it would be a nice thing if nurse practitioners could practice independently but it would involve some pretty tough legal complication....if there ever was a complication it could turn into a pretty big legal battle

In the settings I have worked at nurse practitioners do not function independently, I have heard of them in more rural settings and I have mainly worked in city hospitals in big cities so I haven't dealt with it that much so I really don't know how well they would work in that type of setting

Nurse practitioners are kind of an independent practitioners with MD supervision.

I don't think nurse practitioners should work alone in an Emergency room just because I don't think their scope of training will allow them to put in chest tube and intubate -- and do those type of things and I don't think that is what they want to do anyway.. but as far as extending patient care and being, to see a lot of the everyday bread and butter emergency medicine type patients, I think they function in an emergency room great for that and I know physician assistants and nurse practitioners are being utilized much more in emergency rooms and with either one of those categories I have not heard of any of them that are bad.

Most of the nurse practitioners I have worked with were really good, in fact I can't think of one that I really thought was bad. They all worked out very well and I trusted their advice and what they thought and I never thought they were way off base and the one that I worked with if it was something that they weren't comfortable with or they knew, they knew their limits and they would say this is something that I don't feel comfortable with or I know maybe that I know what it is but it's really not something that a nurse practitioner should be taking care of. And then they would alert the physician and let them know.

I think certainly a nurse practitioner could function well here and do well. The question then becomes if you need to have a supervisory staff here anyhow, then how many patients different can you see. If we were busier, you know that would be a good thing, you know a nurse practitioner and a doc would be a good thing or a PA and a doc.

Theme Cluster 1C: Philosophy of Care

The majority of the physicians felt that nurses and nurse practitioner's philosophy of care was more patient focused.

I have worked with N.P.s in civilian hospitals and in a couple of military hospitals...they are kind of independent practitioners under physician supervision. Kind of the same as a PA just kind of a different philosophy, the main difference is different philosophy of care...more towards the nursing aspect than the PAs have.

The approach to patient depends on the setting, in the ER, nurse practitioners approach patients the same as physicians because there is a set problem and you go into see the patient. A lot of times, however, I saw the nurse practitioners doing more of the total care, where we go in and do our exam and treatment, we, most of the time, because we are busy, don't do discharge planning and all that, where the NPs do it all....they wouldn't turn it over to another nurse to do the discharge planning, they would do it all.

I think nurses and doctors approach patients completely different to begin with and nursing is much more patient centered and nurturing.

Just recently have medical schools begun teaching classes about treating the patient as a human being. In the past medical students were shown books and slides and things on projector screens and chalk boards and patients were nothing more than disease category.

Theme Category 2

Educational Backgrounds/Knowledge Base

The physicians felt that medical school was longer and more rigorous especially in the basic sciences than general nursing school. The physicians felt that becoming a doctor required more years of training which, in turn, gave physicians a greater wealth of knowledge and a greater variety of experiences.

Physicians and nurse practitioners differ in their experiences, it's the bottom line, I mean, obviously the physician, the majority of physicians, have had a lot more experience cause they had a lot more rigorous training.

Medical school is longer, it's the bottom line, how many months do nurse practitioners spend in each field, how much do nurse practitioners have to stand in front of an auditorium trauma conference and explain themselves, it's just experience, so we just have had a head start there.

Years and years of nursing experience isn't the same as medical school. First of all starting with the book learning, I know the nurses I worked with; they were very experienced being nurses for years and years and years but they didn't have the book knowledge at all to know what was going on that's why they are going back to nurse practitioner school to get some of that book learning and they do get a lot of it, not just book learning but the going in and learning intellectually what's going on.

Medical school encompasses more basic sciences, every step of the way from basic sciences to clinical, it's just more advanced and more rigorous, absolutely, I know a lot of nurses and their knowledge is very varied.

I would say a MD has had more rigorous basic sciences and probably more rigorous training with complicated patients and a little more experience at the programs end. To become a MD is a long road with more experiences when they come out.

Physicians have longer training, we have to do the whole college thing, medical school then residency, so it's a longer progressive training than nurses do.

Medical school is a total progressive education, physicians have a longer period, especially in their specialties, we have to do longer clinical training in specialties than RNs do before we go out, there again, we are practicing independently, once we are out.

The first two years of medical school is spent in Chemistry and Embryology.

I have spent the last 12 years completely dedicated to my career and a physician assistant may not have to spend quite that long and likewise for a NP. And you know for 12 years that's all I did, no family, no anything and that's the level of commitment you have to have. And you don't necessarily have to have that level of commitment as a NP or PA...obviously you have to make a lot of sacrifices... its hard to do but I think a lot of people that don't want to be doctors yet have that interest can pursue those routes and particularly women who want to work and want to have babies they can accomplish both of those things by being a NP as by being a physician you just have to kind ofdoctors do not spend much time with their children and if you don't want to do that NP/PA there's a lot more freedom in where you set your hours because if your not on call and your not required to be the person that's there, there is a lot of freedom in where you set your hours and I think it's a great opportunity.

I think that a physician's training is a little more broad; the four years of medical school and then a whole year of internship, it's really five years of nothing but broad scope medical training...so I think physicians, in general, will have a bigger knowledge base, and a bigger education base.

Theme Category 3

Trust Issues

The five physicians felt that there was no specific need in every emergency department for the establishment of written guidelines for nurse practitioners. The majority of the physicians felt that establishing a working comfort level regarding the abilities of the nurse practitioner was more important.

The need for written guidelines would depend on the dynamics of the ER

I don't think written guidelines have to be the case...once you have worked with a nurse practitioner awhile and established a certain comfort level...I don't think that written guidelines would be a necessity.

I would want the nurse practitioner to have to go over with me what their patients were....it would be quite a bit different if it was a runny nose and that kind of stuff, but abdominal pains and other stuff I might spend more time with but then as I got to know that person and got to know their limits I could easily see them minding their own business and when just say when you find something you don't feel comfortable with then come ask me then otherwise I'll sign all your charts at the end of the shift...You know it takes a little while to develop that kind of relationship.

I'm not a protocol type person I don't think that protocols really benefit, in an ER situation patient's are triaged in how so they are categorized in little groups as long as the nurse practitioner saw those groups of patients that were non-urgent or not acute I think that would be fine and then if they wanted, but I would hate to be limited by that and if they wanted to see other more acute patients and be followed closer by the physician I wouldn't have a problem would that either and we did that also, some the nurse practitioners, PAs wanted to see things like MIs, CHF and we would let them.

I am very liberal, I'm sure the staff would tell you, I let people do all kinds of stuff as long as, once they prove themselves to me. I mean I don't need to look at anyone's paperwork once they have proven competency, I don't need to do wound checks, I don't, you know, be there if someone decides a patient needs to be taken inside for a breathing treatment they have my

blessing to start all of the stuff, and that's really operator-dependent to me, You know once you prove yourself I'll let you do pretty much whatever you want...probably more than other people would.

I would want the nurse practitioner to present to me for awhile. That would be for anybody...a PA, a NP, that would be for a resident and until I am comfortable with their training level then could do basically whatever.

If a fast track clinic is run by the Emergency department then the physician needs to co-sign every chart. This is not the case if it is run by Family Medicine.

Theme Category 4

Role Receptivity

The physicians were all very favorable of having nurse practitioners work within Air Force Emergency Departments. When asked if they saw a benefit in assigning nurse practitioners to emergency departments the physicians were very supportive and felt nurse practitioners would function well.

Yea, absolutely, I would like a nurse practitioner assigned to this emergency room.

I absolutely see a benefit in assigning NP to ERs, I believe in help.

In a Level II... nurse practitioners would probably be utilized in the same capacity as a PA, mainly to help with the flow of patients, it's always good to have another hand available...to help out.

I think nurse practitioners function in an emergency rooms great and I know physician assistants and nurse practitioners are being utilized much more in emergency rooms and I have not heard of any of them that are bad.

My job could easily be done by a nurse practitioner 95% of the time because in the military kind of setting, you are dealing with young, healthy folks who are not hemodynamically or neurologically unstable....

I think certainly a nurse practitioner could function well here and do well.

CHAPTER VI

This chapter is divided into three sections: discussion of the findings, significance of the study and recommendations for further research.

Discussion of the Findings

The purpose of this study was to explore and describe the attitudes and perceptions of Air Force Emergency Department physicians regarding collaborative practice with nurse practitioners in Emergency Departments. The four theme categories that emerged depict the thoughts of five Air Force emergency department physicians from one Air Force Emergency Department. Although, the sample population is not a representation of all current Air Force Emergency Department physicians; it provides initial data regarding the current feelings and perceptions of emergency department physicians at one Air Force medical center.

Similar descriptors were noted from those interviewed in Cairo's 1996 study and this study. Each of the sample populations believed that physician oversight was needed when a nurse practitioner worked in an emergency department. Air Force physicians, while willing to work with nurse practitioners in Emergency Departments, still perceived the role of the nurse practitioner as dependent; one in which a physician would ultimately be in charge. Cairo identified these feelings/statements as "passive acceptance" by the physicians or acceptance of nurse practitioners under certain conditions - if the physician was ultimately in charge. For example, Cairo stated that many physicians stated receptivity with a disclaimer such as "I'm supportive of the role, but...." (p. 415). This viewpoint of passive acceptance or dependence is echoed in the 1991 policy statement by the American College of Emergency Physicians which

states that nurse practitioners may render care only under the supervision of an emergency room physician who is ultimately responsible for the patient's medical care (Curry, 1994).

Both groups of physicians interviewed had many trust issues. In fact, identical statements with the words "comfort level" included were made by both groups of physicians. A physician from each group stated that before they could trust a nurse practitioner and would not have to "check" on everything the nurse practitioner did; a certain "comfort level" or "working relationship" would have to be established. An Air Force physician stated that after this trust had been established that he would let "the nurse practitioner do pretty much whatever they wanted" with patients without having to consult him first.

Very similar statement's regarding educational requirements were made by Air Force emergency department physicians and the civilian emergency department physicians in Cairo's (1996) study. Both groups of physicians were basically aware that additional training was required for a nurse to perform as a nurse practitioner. For example, one Air Force physician stated to the researcher "I would say there is a couple of years training beyond a four year nursing degree.....a few years thru a specialized school or nurse practitioner school". Both groups of physicians felt that a physician's training was more rigorous. Cairo concluded that the physicians in her study felt that their education was superior and better prepared them to deal with many clinical problems independently. One physician in Cairo's study stated that nurse practitioners in emergency departments functioned "just like a resident" (p. 415). An almost identical statement was made by an Air Force physician when he stated "I expect the 'nurse practitioners' to hand off the more advanced patients or be in a resident's role".

Physicians from Cairo's (1996) study and the current study felt that nurse practitioners functioned in relatively the same manner as physician assistants in emergency departments. Statements to support this were made repeatedly in the current study and can be found in the theme category entitled "Functional Capacity of the Nurse Practitioner" in Chapter Five. Several physicians from Cairo's study felt that in the emergency department, nurse practitioners and physician assistants were "interchangeable".

One physician from each study group commented that they felt that nurse practitioners looked upon the patient more as a whole, not just a disease category or illness. A physician interviewed from the Air Force felt that nurse practitioners did more of the "total care" of the patient and not just the exam and treatment. Another Air Force physician commented that nurses, in general, and doctors "approach patients completely different with nursing being much more patient centered and nurturing".

Like their civilian counterparts, the Air Force physicians were receptive to nurse practitioners working in the emergency department if the nurse practitioners were supervised and not working alone. One physician from Cairo's (1996) study stated the "optimal situation for a nurse practitioner in an ER is one where they were "always supervised" (p.414). Another physician in Cairo's study even felt that there were more appropriate places for nurse practitioners to be utilized such as in indigent, rural or underserved areas. One Air Force physician also stated that he had heard of nurse practitioners working in more "rural settings". This same Air Force physician stated that he felt that nurse practitioners would do better "with a panel of patients."

In Cairo's (1996) study, the feeling of competition between the physician and the nurse practitioner was brought up. One doctor in Cairo's study stated that "if a doctor is available, I think to have a different practitioner fill the same role puts them in competition...to have them work together would be like oil and water" (p. 415). No competition issues emerged from the interviews held with the Air Force physicians. One might hypothesize this issue might not have arisen because of the environment in which military practitioners have historically worked. Physicians and nurse practitioners have not had to "compete" for positions but were given assignments based on the hospital commander and resource managers (Hart & Conners, 1996).

Physicians from both groups were concerned about legal liability. Both Air Force physicians and civilian physicians stated the physician held ultimate responsibility/legal liability for the Emergency department patient. One military physician commented that legal battles may occur if a patient experienced a complication. This argument helped support both group's position that nurse practitioners should not function independently within Emergency Departments. This finding is of interest as many studies have shown that nurse practitioners functioning in primary care areas provide care which is comparable to physicians (McGrath, 1990). Other studies have concluded that nurse practitioners function very well in Fast Track Clinics within existing Emergency Departments with very few legal complications (Buchanan & Powers, 1996; Covington et al., 1991, Curry, 1994)

Significance of the Study

The statements made by Air Force physician's regarding the interchangeability of nurse practitioners and physician assistants in the Emergency Department are significant to role

expansion of nurse practitioners in this area. If a nurse practitioner would be assigned to an Emergency Department, according to the physicians in this study, the nurse practitioner should perform like a physician assistant. Resource management in the Air Force may have similar expectations for nurse practitioners. For example, according to the June 1997 Nightingale Express, the Air Force Nurse Corps Director's Newsletter, nurse practitioner's and physician assistant's personnel codes are currently interchangeable from the manpower standpoint (p. 32).

If nurse practitioners are expected to "perform like physician assistants" what does this mean for the nurse practitioner who may not be familiar with the philosophy and approach taken by physician assistants. Nurse practitioners may not be sure what the physician assistant's role is in the Emergency Department and may not be able to fulfill this role as expected. Nurse practitioners would need to educate the emergency department physician about the role of the nurse practitioner who has been trained to handle acute problems but whose focus is also on prevention. Physician assistant's role has been to work directly under the supervision and direction of physicians in Emergency Departments to handle acute problems. Physician assistants working in Emergency Departments many times also possess technical, procedural knowledge such as the skill of suturing (Herrera & Gendron, 1994). Nurse practitioners may not have had the opportunity to acquire these skills and may need more exposure. One Air Force physician stated that he saw the main difference between a nurse practitioner and a physician assistant was the "philosophy of care...nurse practitioners focus more on the nursing aspect".

The physicians surveyed in this study also seemed to acknowledge there were differences between the care given by the physician and nurse practitioner but did not as a group describe

these differences to a great extent or with any depth. One Air Force physician did state, however, that he felt that "nurses and doctors approach patients completely different...nursing is much more patient centered and nurturing". The need to educate emergency department physicians regarding the role of the nurse practitioner is seen as a very significant finding of this study for successful role expansion to occur in the emergency department.

Another consideration which becomes important to this study are the predicted changes regarding utilization of personnel in the future as military health care comes under TRICARE (Tomich, 1997). Hospital commanders and resource managers will need to base decisions regarding the best utilization of personnel as to what will best fulfill the mission, vision and guiding principles of each military facility. Cost-effectiveness will become a real issue (Hart, 1996). Brigadier General Leslie Burger, a physician and a lead agent of TRICARE implementation at Walter Reed Army Medical Center, stated in the October 1997 issue of *Military Medicine* "health care is 15 per cent of the Gross Domestic Product....consequently, there is tremendous pressure to make military medicine more efficient. General Burger also predicted that more downsizing of military personnel lies ahead" (Tomich, p. 18).

Nurse practitioners have proven to be cost-effective and efficient in civilian emergency departments (Buchanan & Powers, 1996). Therefore, nurse practitioners utilized in Air Force Emergency Departments could be expected to perform equally to their civilian counterparts. In fact, the Air Force Emergency Department utilizing nurse practitioners in a Minor Care Clinic has proven to be successful and the non-physician providers have been well-received by military beneficiaries as well as Air Force emergency department physicians.

Recommendations for Future Research

The findings of this study have implications for further research regarding utilization of nurse practitioners throughout the Air Force, particularly in Emergency Departments. A study utilizing quantitative methodology, such as a survey, would allow for a greater number of emergency department physicians to be questioned regarding their perceptions of the role of the nurse practitioner in the Emergency Department. This would add to the knowledge obtained from this study, and the larger sample population would allow for a greater representation of Air Force emergency department physicians.

Studies should be done at the Air Force facility currently utilizing nurse practitioners within the facility in the Minor Care Clinic. Studies done at this facility should attempt to explore the types of patients being seen, patient satisfaction, outcome variables and the physician-nurse practitioner relationship. The information obtained from such a study would be useful in developing marketing strategies aimed at Air Force emergency department physicians in other facilities, resource management officers, and hospital commanders Air Force wide.

In conclusion, this study of the perceptions of Emergency Department physicians regarding collaborative practice with Family Nurse Practitioners provided a forum for Air Force Emergency Department physicians to discuss their views and preexisting bias regarding the assignment nurse practitioners to Emergency Departments. The physicians' comments provide insight to nurse practitioners regarding how Emergency Department physicians see their role and scope of practice. The study also demonstrated that qualitative methods can be useful to describe and explore empirical questions which may influence future practice.

References

- Abdellah, F.G. & Levine, E. (1994). Preparing nursing research for the 21st century. New York: Springer.
- Blount, B. & Hereford, W. (1995). Military hospital closure and local retirees. Military Medicine, 160(4), 184-189.
- Buchanan, L. & Powers, R. (1996). Establishing a NP-staffed minor emergency area. Nursing Management, 27(2), 25-31.
- Burns, N. & Grove, S. (1993). The practice of nursing research: conduct, critique & utilization. 2nd. Ed. Philadelphia: W.B. Saunders Company.
- Cairo, M. (1996). Emergency physicians' attitudes toward the emergency nurse practitioner role: Validation versus rejection. Journal of the American Academy of Nurse Practitioners, 8(9), 411-417.
- Covington, C., Erwin, T., & Sellers, F., (1991). Implementation of a nurse practitioner-staffed fast track. Journal of Emergency Nursing, 18, 124-128.
- Cross, R., & Riggs, L. (1984). The hospital's role in emergency medical services system. Chicago, IL: American Hospital Publishing, Inc.
- Curry, J. (1994). Nurse practitioners in the emergency department: Current issues. Journal of Emergency Nursing, 20(3), 207-212.
- Derlet, R., & Nisho, D., (1990). Refusing care to patients who present of an emergency department. Annals of Emergency Medicine, 19, 262-267.
- Dowling, D. & Dudley, W. (1995). Nurse practitioners meeting the ED's needs. Nursing Management, 26(1), 48C-48J.

- Erlandson, D., Harris, E., Skipper, B., & Allen, S. (1993). Doing naturalistic inquiry: a guide to methods. Newbury Park, CA: SAGE.
- Glaser, B., & Strauss, A. (1966). The purpose and credibility of qualitative research. Nursing Research, 15(1), 56-61.
- Grumbach, K., Keane, D., & Bindman, A. (1993). Primary care and public emergency department overcrowding. American Journal of Public Health, 83(3), 372-378.
- Halfon, N., Newacheck, P., Wood, D., & Peter, R., (1996) Routine emergency department use for sick care by children in the United States. Pediatrics, 63, 28-34.
- Hart, S. & Connors, R., (1996). Resourcing decision model for military hospitals. Military Medicine, 161(9), 552-556.
- Hayden, M., Davies, L., & Clore, E. (1982). Facilitators and inhibitors of the emergency nurse practitioner role. Nursing Research, 31(5), 294-299.
- Herrera, J. & Gendron, B. (1994). Military emergency medicine physician assistants. Military Medicine, 159(3), 241-242.
- Lenahan, G. (1993). Editorial: Timing is everything: The growing need for emergency nurse practitioners. Journal of Emergency Nursing, 19 (4). 269-270.
- Liggins, K. (1993). Inappropriate attendance at accident and emergency departments: A literature review. Journal of Advanced Nursing, 18, 1141-1145.
- Lincoln, Y. & Guba, E. (1985). Naturalistic inquiry. Beverly Hills, CA: Sage.

- Maroon, H. J. (1976). My experiences and conflicts as a primary care nurse practitioner. Medical Service Digest, 27(3), 28-29.
- Marshall, C. & Rossman, G. (1995). Designing qualitative research, 2nd Ed. Thousand Oaks, CA: SAGE Publications.
- McGee, W. & Hudak, R. (1995). Reengineering medical treatment facilities for Tricare: The medical group practice model. Military Medicine, 160(5), 235-239.
- McGrath, S. (1990). The cost-effectiveness of nurse practitioners. Nurse Practitioner, 15(7), 40-42.
- Munhall, P. & Boyd, C. (1993). Nursing research: A qualitative perceptive. New York: National League for Nursing.
- Read, S. & George, S. (1994). Nurse practitioners in accident and emergency departments: Reflections on a pilot study. Journal of Advanced Nursing, 19, 705-716.
- Simon, H., McLario, D., Daily, R., Lanese, C., Castillo, J., & Wright, J. (1996). "Fast Tracking" patients in an urban pediatric emergency department. American Journal of Emergency Medicine, 14(3), 242-244.
- Tomich, N. (1997). Tricare Focus: Role of Providers. U.S. Medicine, 33(19), 3-19.
- Wright, S., Erwin, T., Blanton, D., & Covington, C., (1992). Fast track in the emergency department: A one-year experience with nurse practitioners. The Journal of Emergency Medicine, 10, 367-373.

Appendix A

CONSENT FROM MARY JANE CAIRO

CAIRO'S SEMI-STRUCTURED INTERVIEW FORMAT

TELEPHONE PERMISSION:

Mary Jane Cairo was phoned in early February 1997 to inquire about using her research questions in the present study. Cairo gave verbal permission and sent a copy of the attached page of her semi-structured interview format to the researcher's home late February 1997.

Question Guide: Emergency Physicians' Attitudes Toward the Emergency Nurse Practitioner Role: Validation vs Rejection

****A semi-structured interview format was used based in general on the following brief, general questions (section 1). These broad, general questions were used to initiate conversation. The interviews then proceeded to more specific areas of questioning (section 2), as directed by the respondents.**

Section 1

1. What is advanced practice nursing?
2. What are the educational requirements for nurse practitioners?
3. Describe the role of a nurse practitioner (in general).
 - where do they practice?
 - where are they needed?
4. What training, knowledge, and skills do nurses have that physicians do not?

Section 2

Additional issues brought up in my interviews by the respondents:

1. trust
2. competition
3. third party reimbursement
4. hospital admitting privileges
5. prescriptive authority
6. legal liability
7. independence
8. comparison between PA's and NP's

Appendix B
CONSENT FORM



UNIFORMED SERVICES UNIVERSITY OF THE HEALTH SCIENCES

4301 JONES BRIDGE ROAD
BETHESDA, MARYLAND 20814-4799



Informed Consent for Participation in a Research Study

Title of research study: Perceptions of Emergency Department Physicians Toward Collaborative Practice with Nurse Practitioners in an Emergency Department Setting

Researcher: Capt Tracy A. Wingert, USAF, NC
Graduate School of Nursing
Uniformed Services University of the Health Sciences

Purpose of Study: The aim of this research study is to describe Emergency Department physician's attitudes toward collaborative practice with Family Nurse Practitioners. The study will provide a forum for Air Force emergency department physician to discuss their views, concerns or preexisting biases regarding assigning nurse practitioners to emergency departments.

Explanation of the Research Process: This research study will involve the researcher interviewing and audio recording a discussion with Emergency Department physicians. The researcher will use an interview guide to elicit discussion from the physicians. The interview will take place in the Emergency Department during non-peak hours. The researcher will make notations during the interviews in order to include non-verbal communications. Participation in this study is strictly voluntary and there will be no retribution for not participating. Confidentiality will be maintained at all times. No references to the name of the facility or name of the participant will be used in the study. Information obtained in this study will be formulated into a descriptive report and included in the researcher's Master's Thesis. Upon completion, a copy will be reviewed by the faculty at the Graduate School of Nursing at the Uniformed Services University of the Health Sciences, a copy will be maintained in the Learning Resource Center (library) of the university, and a copy will be forwarded to the Air University Library at Maxwell Air Force Base, Alabama. Inherent in this research endeavor is the potential for publication of this study.

As a participant in this study, you have the right to ask questions or discuss concerns at any time during the research process. You may discuss any questions/concerns with the researcher at this time or you may phone her later at (301) 495-2892 or you may contact the Graduate School of Nursing at (301) 295-1989. The Thesis Committee Chairperson for this study is LTC Regina Aune, USAF, PhD.

initials/date



Risks and Benefits of participation in this study: This research study poses no physical risks to any participants. The time necessary to conduct the interviews should not inconvenience the participant or interfere with patient care in the Emergency Department. The benefit of participating in this research study will be the knowledge that you are assisting in a scientific endeavor which will hopefully prove to be beneficial to the Air Force in deciding the most beneficial placement of Family Nurse Practitioners within military treatment facilities. The proper utilization of Family Nurse Practitioners will aide in providing continued quality care to all military health care recipients.

This study should not entail any physical or mental risk to the participants. If for any reason, you feel that continuing this study would constitute a hardship for you, we will end your participation in this study. If at any time you feel that you have suffered in any way as a result of being a participant in this study, you may contact LTC Michael J. McGreery, Director of Research Program at the Office of Research Administration at the Uniformed Services University of the Health Sciences, Bethesda, MD 20814 at (301) 295-3303. LTC McGreery can review the matter with you and can provide information about your rights as a subject and may be able to identify resources available to you.

initials/date

Appendix C

FACILITY PERMISSION LETTER



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 55TH WING (ACC)
OFFUTT AIR FORCE BASE, NEBRASKA

5 May 97

MEMORANDUM FOR CAPT TRACY WINGERT

FROM: Major Michael Henry, Element Chief, Emergency Department, Offutt AFB

SUBJECT: Research Study at Offutt AFB 5-10 May 1997

Permission has been granted by Col Helen Fronefield, Hospital Commander for you to conduct your research study which involves interviewing Emergency Department physicians regarding their perceptions of nurse practitioners within an emergency room setting.

Michael W. Henry
MICHAEL HENRY, Major, USAF
Element Leader Emergency Department

Global Power for America

Appendix D

UNIFORMED SERVICES INSTITUTIONAL REVIEW BOARD APPROVAL



UNIFORMED SERVICES UNIVERSITY OF THE HEALTH SCIENCES
4301 JONES BRIDGE ROAD
BETHESDA, MARYLAND 20814-4799



May 1, 1997

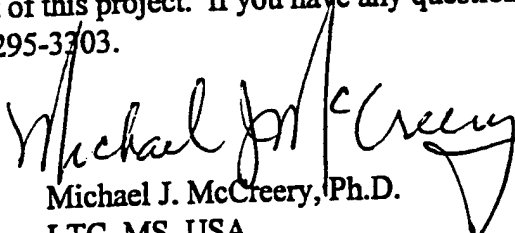
MEMORANDUM FOR TRACY A. WINGERT, GRADUATE SCHOOL OF NURSING

SUBJECT: IRB Approval for Protocol T06132-01 Involving Human Subject Use

The new protocol entitled *"Perceptions of Emergency Room Physicians Toward Collaborative Practice with Family Nurse Practitioners in an Emergency Room Setting"* received an expedited review and was **APPROVED** by Edmund G. Howe, M.D., J.D., Chairperson, Institutional Review Board on May 1, 1997 in accordance with 32 CFR 219.110 (b)(1). The principal investigator will perform interviews with Emergency Department physicians in which an interview guide involving nonsensitive questions and comments will be used to elicit discussion. The researcher will make notations during the interview to record non-verbal communications and audio recordings to chronicle the discussions. Names of those interviewed will not be recorded by audio tape or in writing nor will any identifiers be used.

The consent form approved for use is attached. It is your responsibility to review and maintain an accurate and accessible file of all consent forms used in this study for each study site. This research study will be reviewed within one year of this date, unless otherwise completed.

Please notify this office of any amendments you wish to propose and of any undue incidents which may occur in the conduct of this project. If you have any questions regarding human volunteers, please call me at 301-295-3303.


Michael J. McCreery, Ph.D.
LTC, MS, USA
Director, Research Programs and
Executive Secretary, IRB

Attachments:
A/S





UNIFORMED SERVICES UNIVERSITY OF THE HEALTH SCIENCES

4301 JONES BRIDGE ROAD
BETHESDA, MARYLAND 20814-4799



EXPEDITED HUMAN USE REVIEW


GRANT NUMBER: **T06132-01**

PRINCIPAL INVESTIGATOR: **Captain Tracy A. Wingert**

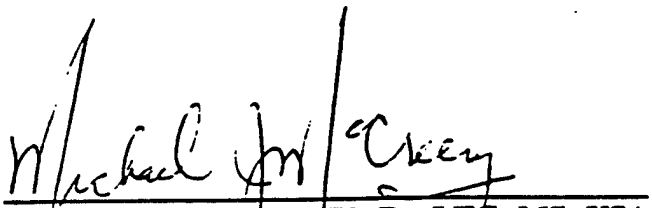
TITLE: ***Perceptions of Emergency Room Physicians Toward Collaborative Practice
with Family Nurse Practitioners in an Emergency Room Setting***

RATIONALE FOR EXPEDITED REVIEW:

This is a minimal risk study per 32 CFR 219.110 (b)(1). The principal investigator will perform interviews with Emergency Department physicians in which an interview guide involving nonsensitive questions and comments will be used to elicit discussion. The researcher will make notations during the interview to record non-verbal communications and audio recordings to chronicle the discussions. Names of those interviewed will not be recorded by audio tape or in writing nor will any identifiers be used.


Edmund G. Howe, M.D., J.D.
Chairperson, Institutional Review Board

1 May 97
Date


Michael J. McCreery, Ph.D., LTC, MS, USA
Director, Research Programs

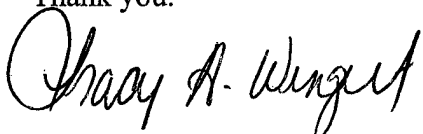
1 May 97
Date

10 June 1998

Major Johnson
Department of the Air Force
Air Force Institute of Technology
Wright-Patterson AFB, OH 45433-7765

I, Tracy A. Wingert, Capt, USAF, NC, attended the Uniformed Services University of Health Sciences and am requesting reimbursement for my thesis (\$100).

Thank you.

A handwritten signature in cursive script that reads "Tracy A. Wingert". The signature is written in dark ink and is positioned above the printed name and address.

Capt Tracy A. Wingert
c/o Doris Wingert
2120 Delaware Ave.
Bronson, IA 51007